LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A three-dimensional model search method of searching for a specific three-dimensional model of a plurality of three-dimensional models, comprising:

a search object image production step of producing a plurality of two-dimensional images obtained by observing the specific three-dimensional model as an object of search from points of view different from one another based on the specific three-dimensional model;

a search object storage step for storing three-dimensional model information regarding the specific three-dimensional model and two-dimensional image information regarding the plurality of two-dimensional images;

a search key input step of inputting a two-dimensional image as a search key;

a comparison step for comparing a similarity of the two-dimensional image input as the search key with similarities of the plurality of two-dimensional images for which the two-dimensional image information is stored in the search object storage step, the comparison step being carried out based on feature values, which are parameter values obtained based on color components as a histogram obtained by quantizing values for respective color information, which is contained as those image components of image components in each of the two-dimensional images, which enable the similarities to be determined, and a shape histogram obtained by quantizing edge differentials;

a determination step for determining similarities of the two-dimensional images based on a result of comparison in the comparison step; and

a three-dimensional model specification step for specifying a three-dimensional model associated with a two-dimensional image whose similarity is determined to be high in the determination step.

2. (Original) The three-dimensional model search method according to claim 1, wherein the two-dimensional image produced in the search object image production step is a two-dimensional projection image and/or a sectional image which corresponds to the three-dimensional model.

3. (Original) The three-dimensional model search method according to claim 2, wherein the two-dimensional projection image and/or the sectional image includes texture information.

4 – 5. (Canceled)

6. (Currently Amended) A three-dimensional model search apparatus for searching for a specific three-dimensional model of a plurality of three-dimensional models, comprising:

a search object image production section which produces a plurality of two-dimensional images obtained by observing the specific three-dimensional model as an object of search from points of view different from one another based on the specific three-dimensional model;

a search object storage section for storing three-dimensional model information regarding the specific three-dimensional model and two-dimensional image information regarding the plurality of two-dimensional images;

a search key input section which inputs a two-dimensional image as a search key;

a comparison section for comparing a similarity of the two-dimensional image input as the search key with similarities of the plurality of two-dimensional images for which the two-dimensional image information is stored in the search object storage section, the comparison being carried out based on feature values, which are parameter values obtained based on color components as a histogram obtained by quantizing values for respective color information, which is contained as those image components of image components in each of the two-dimensional images, which enable the similarities to be determined, and a shape histogram obtained by quantizing edge differentials;

a determination section for determining similarities of the two-dimensional images based on a result of comparison in the comparison section; and

a three-dimensional model specification section for specifying a three-dimensional model associated with a two-dimensional image whose similarity is determined to be high in the determination section.

7. (Original) The three-dimensional model search apparatus according to claim 6, wherein the two-dimensional image produced in the search object image production section is a two-dimensional projection image and/or a sectional image which corresponds to the three-dimensional model.

8. (Original) The three-dimensional model search apparatus according to claim 7, wherein the two-dimensional projection image and/or the sectional image includes texture information.

9-10. (Canceled)

11. (Currently Amended) A three-dimensional model search program which allows a computer to search for a specific three-dimensional model of a plurality of three-dimensional models and which allows the computer to realize:

a search object image production function of producing a plurality of two-dimensional images obtained by observing the specific three-dimensional model as an object of search from points of view different from one another based on the specific three-dimensional model;

a search object storage function for storing three-dimensional model information regarding the specific three-dimensional model and two-dimensional image information regarding the plurality of two-dimensional images;

a comparison function for comparing a similarity of the two-dimensional image input as the search key with similarities of the plurality of two-dimensional images for which the two-dimensional image information is stored in the search object storage function, the comparison function being carried out based on feature values, which are parameter values obtained based on color components as a histogram obtained by quantizing values for respective color information, which is contained as those image components of image components in each of the two-dimensional images, which enable the similarities to be determined, and a shape histogram obtained by quantizing edge differentials;

a determination function for determining similarities of the two-dimensional images based on a result of comparison in the comparison function; and

a three-dimensional model specification function for specifying a three-dimensional model associated with a two-dimensional image whose similarity is determined to be high in the determination function.

12. (Currently Amended) A three-dimensional model search system for searching for a specific three-dimensional model of a plurality of three-dimensional models, comprising:

a search object storage section for storing three-dimensional model information regarding the specific three-dimensional model and two-dimensional image information regarding a plurality of two-dimensional images;

a comparison section for comparing a similarity of a two-dimensional image input as a search key with similarities of the plurality of two-dimensional images for which the two-dimensional image information is stored in the search object storage section, the comparison being carried out based on feature values, which are parameter values obtained based on color components as a histogram obtained by quantizing values for respective color information, which is contained as those image components of image components in each of the two-dimensional images, which enable the similarities to be determined, and a shape histogram obtained by quantizing edge differentials;

a determination section for determining similarities of the two-dimensional images based on a result of comparison in the comparison section; and

a three-dimensional model specification section for specifying a three-dimensional model associated with a two-dimensional image whose similarity is determined to be high in the determination section.

13. (Currently Amended) A three-dimensional model search apparatus for searching for a specific three-dimensional model of a plurality of three-dimensional models, comprising:

search object image production means for producing a plurality of two-dimensional images obtained by observing the specific three-dimensional model as an object of search from points of view different from one another based on the specific three-dimensional model;

a search object storage means for storing three-dimensional model information regarding the specific three-dimensional model and two-dimensional image information regarding the plurality of two-dimensional images;

search key input means for inputting a two-dimensional image as a search key;

a comparison means for comparing a similarity of the two-dimensional image input as the search key with similarities of the plurality of two-dimensional images for which the two-dimensional image information is stored in the search object storage means, the comparison being carried out based on feature values, which are parameter values obtained based on color components as a histogram obtained by quantizing values for respective color information, which is contained as those image components of image components in each of the two-dimensional images, which enable the similarities to be determined, and a shape histogram obtained by quantizing edge differentials;

a determination means for determining similarities of the two-dimensional images based on a result of comparison in the comparison means; and

a three-dimensional model specification means for specifying a three-dimensional model associated with a two-dimensional image whose similarity is determined to be high in the determination means.

14. (Canceled)